IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	) Group Art Unit: 2133
	)
William H. Thesling III et al.	) Examiner: Chung, Phung M.
	)
Patent No.:7,117,418 B2	) **REQUEST FOR CERTIFICATE OF**
Serial No.: 09/954,698	) **CORRECTION OF PATENT FOR**
	) **U.S.P.T.O. MISTAKES UNDER 37 CFR**
Filed: September 11, 2001	) **§1.322**
Issued: October 3, 2006	)
	) 162 North Wolfe Road
For: **SOFT INPUT-SOFT OUTPUT**	) Sunnyvale, CA 94086
FORWARD ERROR	) (408) 530-9700
CORRECTION DECODING FOR	)
TURBO CODES	) Customer Number 28960
	)

Attn: Decision and Certificate of Correction
Branch of the Patent Issue Division
Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

Sir:

Attached in duplicate is Form PTO-1050, with at least one copy being suitable for printing. The corrections stated in the attached Form PTO-1050 recite the corrections stated below.

Below, column and line numbers refer to U.S. Patent Number 7,117,418, titled "Soft Input-Soft Output Forward Error Correction Decoding For Turbo Codes," and issued October 3, 2006. Page and line numbers refer to the corresponding U.S. Patent Application Serial Number 09/954,698 (the '698 application), filed September 11, 2001.

Certificate
NOV 0 9 2006
of Correction

NOV 1 3 2006

CORRECTION OF PATENT OFFICE'S
MISTAKES UNDER 37 C.F.R. §1.322

The following are mistakes made by the U.S. Patent Office. The exact page and line number where the errors are shown correctly in the application file are given below.

<u>In the Specifications</u>

At column 5, line 45, please replace "(M0)+RM(M)+RV(M2)+RV(MX)" with - (M0)+RV(M1)+RV(M2)+RV(MX) - so that the corresponding phrase reads – RV(M0)+RV(M1)+RV(M2)+RV(MX); –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 10, line 11.

At column 6, line 1, please add a return between "222-230)+RV(MY);" and "RVO(M2)=DM2-DM0=DM" so that the corresponding phrase reads

– blocks 222-230)+RV(MY);

RVO(M2)=DM2-DM0=DM(SCA)-DM(HDDV)=RV(M0)+RV(M1)+RV(M2)+

RV(MX); –.

The phrase is shown correctly in the application mailed on September 11, 2001, on page 10, line 29.

At column 6, line 16, please replace "(M0)-RV(ML)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) - so that the corresponding phrase reads – -RV(M0)-RV(M1)-RV(M2)-RV(MX); –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 11, line 12.

At column 6, line 20, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) - so that the corresponding phrase reads – -RV(M0)-RV(M1)-RV(M2)-RV(MX); –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 11, line 16.

At column 6, line 22, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) - so that the corresponding phrase reads – -RV(M0)-RV(M1)-RV(M2)-RV(MX); –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 11, line 18.

At column 6, line 48, please replace "(M0)-RV(ML)-(RV(M3)" with - (M0)-RV(M1)-(RV(M3) - so that the corresponding phrase reads – -RV(M0)-RV(M1)-(RV(M3) or RV(M4), –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 12, line 8.

At column 6, line 51, please replace "(M0)-RV(M)-(RV(M3)" with - (M0)-RV(M1)-(RV(M3) - so that the corresponding phrase reads – -RV(M0)-RV(M1)-(RV(M3) or RV(M4), –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 12, line 10.

At column 10, line 23, please replace "M4(position 12)" with - M4(position 12) - so that the corresponding phrase reads – M4(position 12)=+0.3, –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 18, line 11.

At column 11, line 8, please replace "RVO(bit 4)-0.3+RV(4)=-0.3-0.9=-1.2" with - RVO(bit 4)=-0.3+RV(4)=-0.3-0.9=-1.2 - so that the corresponding phrase reads – RVO(bit 4)=-0.3+RV(4)=-0.3-0.9=-1.2; –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 19, line 17.

At column 18, line 23, please replace "330where" with - 330 where - so that the corresponding phrase reads – Flow continues to a function block 330 where –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 31, line 16.

At column 18, line 65, please add - RVO(J) = RV(J) + γ + RV(M0) + RV(M1), where J is all other positions. - between "= RV(M3) + RV(MY) + RV(M0) + RV(M1); and " and "b) If the minimum distance metric DM0=DM(HDDV)," so that the corresponding phrase reads
–   = RV(M3) + RV(MY) + RV(M0) + RV(M1); and
RVO(J) = RV(J) + γ + RV(M0) + RV(M1), where J is all other positions.
b) If the minimum distance metric DM0=DM(HDDV), –.
The phrase is shown correctly in the application mailed on June 30, 2004, on page 32, line 15.

At column 19, line 20, please add - RVO(J) = RV(J) + γ + RV(M0) + RV(M1), where J is all other positions. - between "= RV(M3) + RV(MY) + RV(M0) + RV(M1); and" and "c) If the minimum distance metric DM0=DM(SCA), and" so that the corresponding phrase reads
–   = RV(M3) + RV(MY) + RV(M0) + RV(M1); and

$RVO(J) = RV(J) + \gamma + RV(M0) + RV(M1)$, where J is all other positions.

    c) If the minimum distance metric DM0=DM(SCA), and –.

The phrase is shown correctly in the application mailed on June 30, 2004, on page 32, line 30.

At column 19, line 41, please replace "= -RV(M3)" with - = RV(M3) - so that the corresponding phrase reads – = $RV(M3) + RV(MY) - RV(M2) - RV(MX)$; and –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 33, line 14.

At column 19, line 43, please add - $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions. - above the line "d) If the minimum distance metric DM0=DM(SCA), and" so that the corresponding phrase reads

    – $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions.

    d) If the minimum distance metric DM0=DM(SCA), and –.

The phrase is shown correctly in the application mailed on June 30, 2004, on page 33, line 15.

At column 19, line 65, please add - $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions. - between "= $RV(M3) + RV(MY) - RV(M2) - RV(MX)$; and " and "e) If the minimum distance metric DM0=DM(TCA), and" so that the corresponding phrase reads

    –   = $RV(M3) + RV(MY) - RV(M2) - RV(MX)$; and

    $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions.

    "e) If the minimum distance metric DM0=DM(TCA), and –.

The phrase is shown correctly in the application mailed on June 30, 2004, on page 33, line 30.

At column 20, line 19, please replace "= -RV(M0) + RV(M1)" with - = -RV(M0) - RV(M1) - so that the corresponding phrase reads – = $-RV(M0) - RV(M1) - RV(M3) - RV(MY)$; and –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 34, line 14.

At column 20, line 20, please add - $RVO(J) = RV(J) + \gamma - RV(M3) - RV(MY)$, where J is all other positions. - above the line "f) If the minimum distance metric DM0=DM(TCA), and" so that the corresponding phrase reads

    – $RVO(J) = RV(J) + \gamma - RV(M3) - RV(MY)$, where J is all other positions.

    f) If the minimum distance metric DM0=DM(TCA), and –.

The phrase is shown correctly in the application mailed on June 30, 2004, on page 34, line 15.

At column 20, line 41, please replace "= -RV(M2)" with - = RV(M2) - so that the corresponding phrase reads – = RV(M2) + RV(MX) - RV(M3) - RV(MY); and –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 34, line 29.

At column 20, line 42, please add - RVO(J) = RV(J) + γ - RV(M3) - RV(MY), where J is all other positions. - above the line "The constant γ is determined by trial and error. A range of" so that the corresponding phrase reads

– RVO(J) = RV(J) + γ - RV(M3) - RV(MX), where J is all other positions.

The constant γ is determined by trial and error. A range of –.

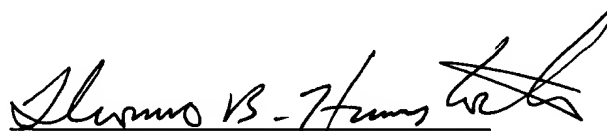The phrase is shown correctly in the application mailed on June 30, 2004, on page 34, line 30.

At column 23, line 43, please replace "DM(TCA - DM(HDDV) - RV - (M0)$_{input}$" with - DM(TCA) - DM(HDDV) - RV(M0)$_{input}$ - so that the corresponding phrase reads – RVO(M0) = DM1 - DM0 - RV(M0)$_{input}$ = DM(TCA) - DM(HDDV) - RV(M0)$_{input}$ –. The phrase is shown correctly in the application mailed on September 11, 2001, on page 38, line 23.

Respectfully submitted

HAVERSTOCK & OWENS LLP

Dated: _11 - 3 -06_   By: _____

Thomas B. Haverstock
Reg. No. 32,571
Attorneys for Applicant(s)

NOV 1 3 2006

PATENT
Attorney Docket No.: AHA-03400

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:) Group Art Unit: 2133
William H. Thesling III et al.)
) Examiner: Chung, Phung M.
Patent No.: 7,117,418 B2   )
Serial No.: 09/954,698   ) **TRANSMITTAL LETTER**
)
Issue Date.:   October 3, 2006) 162 North Wolfe Road
Date Filed: September 11, 2001) Sunnyvale, California 94086
) (408) 530-9700
For: **SOFT INPUT-SOFT OUTPUT**)
      FORWARD ERROR   ) Customer Number 28960
      CORRECTION DECODING FOR)
      TURBO CODES   )
)

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Commissioner for Patents
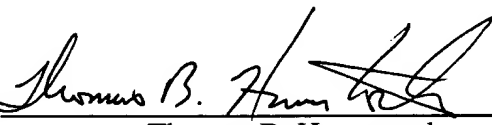P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed please find a request for certificate of correction of patent for USPTO mistake, including form PTO 1050 in duplicate for filing with the U.S. Patent and Trademark office

The Commissioner is authorized to charge any additional fee or credit any overpayment to our Deposit Account No. 08-1275. **An originally executed duplicate of this transmittal is enclosed for this purpose.**
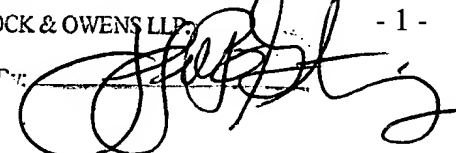
Respectfully submitted,

HAVERSTOCK & OWENS LLP

Dated: 11-3-06

BY Thomas B. Haverstock

Thomas B. Haverstock
Reg. No.: 32,571

Attorneys for Applicants

- 1 -

PATENT
Attorney Docket No.: <u>AHA-03400</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: William H. Thesling III et al. Patent No.: 7,117,418 B2 Serial No.: 09/954,698 Issue Date.: October 3, 2006 Date Filed: September 11, 2001 For: **SOFT INPUT-SOFT OUTPUT FORWARD ERROR CORRECTION DECODING FOR TURBO CODES**	) Group Art Unit: 2133)) Examiner: Chung, Phung M.)) **TRANSMITTAL LETTER**)) 162 North Wolfe Road) Sunnyvale, California 94086) (408) 530-9700)) Customer Number 28960)))

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Branch of the Patent Issue Division
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed please find a request for certificate of correction of patent for USPTO mistake, including form PTO 1050 in duplicate for filing with the U.S. Patent and Trademark office

The Commissioner is authorized to charge any additional fee or credit any overpayment to our Deposit Account No. <u>08-1275</u>. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Respectfully submitted,

HAVERSTOCK & OWENS LLP

Dated: 11/3/06

By: Thomas B. Haverstock
Reg. No.: 32,571

Attorneys for Applicants

- 1 -

NOV 13 2006

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO.   :   7,117,418 B2

DATED   :   October 3, 2006

INVENTOR(S) :   William H. Thesling, Sameep Dave

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby correct as shown below:

Page 1 of 3

IN THE SPECIFICATIONS

At column 5, line 45, please replace "(M0)+RM(M)+RV(M2)+RV(MX)" with - (M0)+RV(M1)+RV(M2)+RV(MX) -.

At column 6, line 1, please add a return between "222-230)+RV(MY);" and "RVO(M2)=DM2-DM0=DM".

At column 6, line 16, please replace "(M0)-RV(ML)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) -.

At column 6, line 20, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) -.

At column 6, line 22, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) -.

At column 6, line 48, please replace "(M0)-RV(ML)-(RV(M3)" with - (M0)-RV(M1)-(RV(M3) -.

At column 6, line 51, please replace "(M0)-RV(M)-(RV(M3)" with - (M0)-RV(M1)-(RV(M3) -.

At column 10, line 23, please replace "M4(position 12)" with - M4(position 12) -.

At column 11, line 8, please replace "RVO(bit 4)-0.3+RV(4)=-0.3-0.9=-1.2" with - RVO(bit 4)=-0.3+RV(4)=-0.3-0.9=-1.2 -.

At column 18, line 23, please replace "330where" with - 330 where -.

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Page 2 of 3

IN THE SPECIFICATIONS

At column 18, line 65, please add - $RVO(J) = RV(J) + \gamma + RV(M0) + RV(M1)$, where J is all other positions. - between "= $RV(M3) + RV(MY) + RV(M0) + RV(M1)$; and " and "b) If the minimum distance metric DM0=DM(HDDV),".

At column 19, line 20, please add - $RVO(J) = RV(J) + \gamma + RV(M0) + RV(M1)$, where J is all other positions. - between "= $RV(M3) + RV(MY) + RV(M0) + RV(M1)$; and" and "c) If the minimum distance metric DM0=DM(SCA), and".

At column 19, line 41, please replace "= $-RV(M3)$" with - = $RV(M3)$ -.

At column 19, line 43, please add - $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions. - above the line "d) If the minimum distance metric DM0=DM(SCA), and".

At column 19, line 65, please add - $RVO(J) = RV(J) + \gamma - RV(M2) - RV(MX)$, where J is all other positions. - between "= $RV(M3) + RV(MY) - RV(M2) - RV(MX)$; and " and "e) If the minimum distance metric DM0=DM(TCA), and".

At column 20, line 19, please replace "= $-RV(M0) + RV(M1)$" with - = $-RV(M0) - RV(M1)$ -.

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Page 3 of 3

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At column 23, line 43, please replace "DM(TCA - DM(HDDV) - RV - $(M0)_{input}$" with - $DM(TCA) - DM(HDDV) - RV(M0)_{input}$ -.

NOV 1 3 2006

MAILING ADDRESS OF SENDER:
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Sunnyvale, CA 94086

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FORM PTO 1050 (REV. 3.82)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

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INVENTOR(S) :   William H. Thesling, Sameep Dave

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At column 6, line 20, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) -.

At column 6, line 22, please replace "(M0)-RV(M)-RV(M2)-RV(MX)" with - (M0)-RV(M1)-RV(M2)-RV(MX) -.

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